



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

March 26, 2003

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby LLP
90 Maple Avenue
White Plains, NY 10601-5196

RE: **EM-AT&T-041-030314** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 135 Honey Hill Road, East Haddam, Connecticut.

Dear Attorney Fisher:

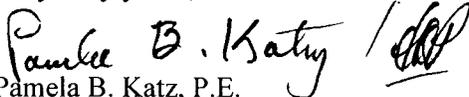
At a public meeting held on March 25, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received in our office on March 14, 2003. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,


Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable Susan D. Merrow, First Selectman, Town of East Haddam
James Ventres, Land-Use Administrator, Town of East Haddam
Eric Rabon, SpectraSite Communications
Julie Donaldson Kohler, Esq., Hurwitz & Sagarin LLC
Thomas F. Flynn III, Nextel Communications
Sandy M. Carter, Verizon Wireless

**NOTICE OF INTENT TO MODIFY AN
EXISTING TELECOMMUNICATIONS FACILITY AT
135 HONEY HILL ROAD, EAST HADDAM, CONNECTICUT**

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 135 Honey Hill Road, East Haddam, Connecticut (the "Honey Hill Road Facility") (Petition No. 587), owned by SpectraSite Communications ("SpectraSite"). AT&T Wireless and SpectraSite have entered into an agreement for the use of the Honey Hill Road Facility, as detailed below.

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MAR 14 2003

**CONNECTICUT
SITING COUNCIL**

The Honey Hill Road Facility

The Honey Hill Road Facility consists of an approximately one hundred fifty (150) foot monopole (the "Tower") and associated equipment currently being used and/or reserved for future use for wireless communications by Sprint, Nextel and Verizon.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by URS Corporation-AES, including a site plan and tower elevation of the Honey Hill Road Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets at grade needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 120 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located on a concrete pad within an expanded fenced compound. The expanded fence compound remains within the original lease parcel, i.e., site boundaries. As evidenced in the structural report prepared by SpectraSite, annexed hereto as Exhibit A, AT&T has confirmed that the Tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

The proposed addition of AT&T Wireless' antennas and equipment to the Honey Hill Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by Galen Belen, RF Engineer, annexed hereto as Exhibit B, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of

REMOVED

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Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

Conclusion

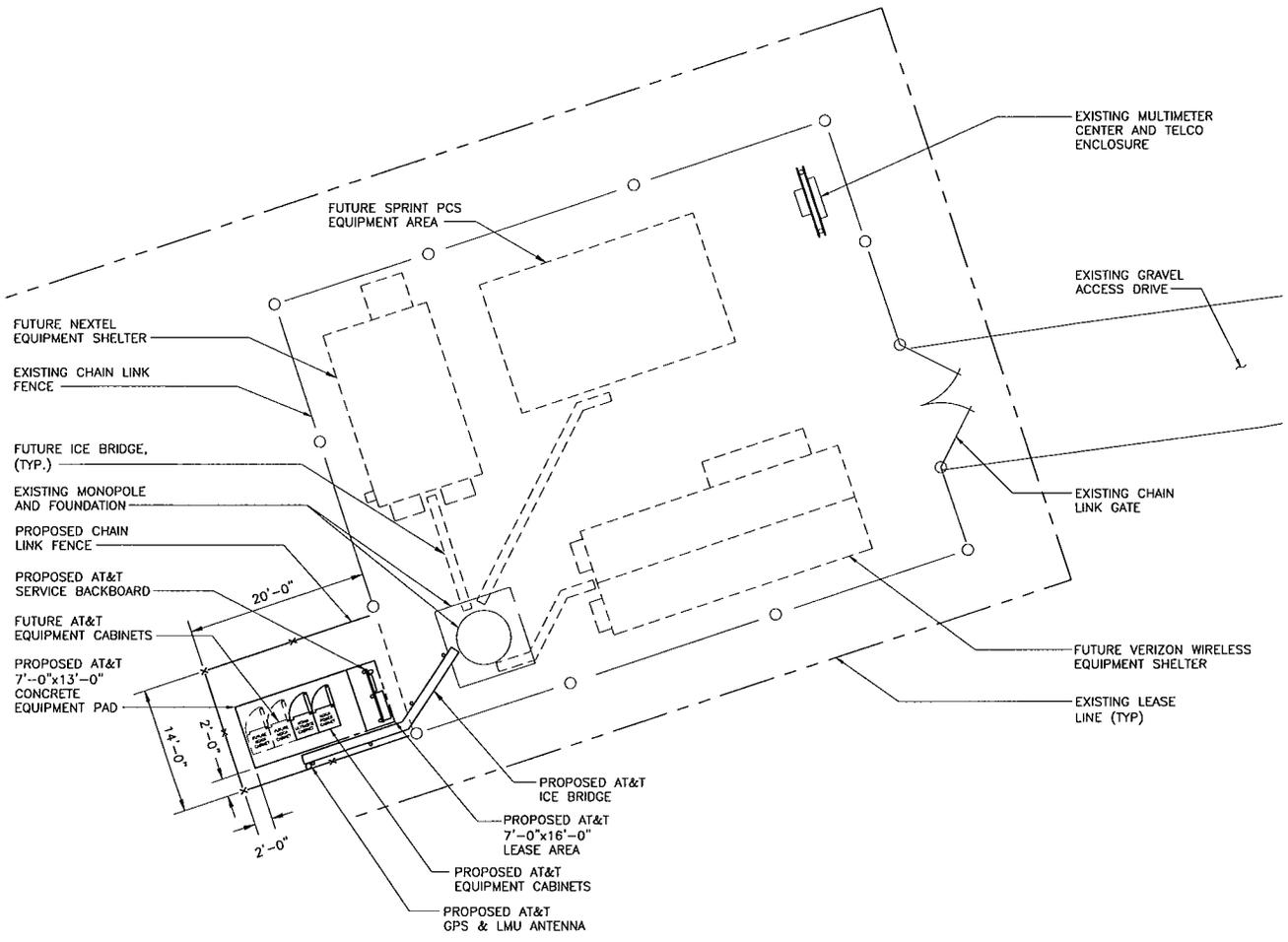
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Honey Hill Road Facility meets the Council's exemption criteria.

Respectfully Submitted,

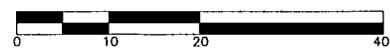
A handwritten signature in black ink, appearing to read 'C.B. Fisher', written in a cursive style.

Christopher B. Fisher, Esq.
On behalf of AT&T Wireless

cc: First Selectman, Town of East Haddam
Sue Silva, Bechtel



1 PARTIAL SITE PLAN
SC-1 SCALE: 1" = 20'-0"



ISSUED FOR SITING COUNCIL

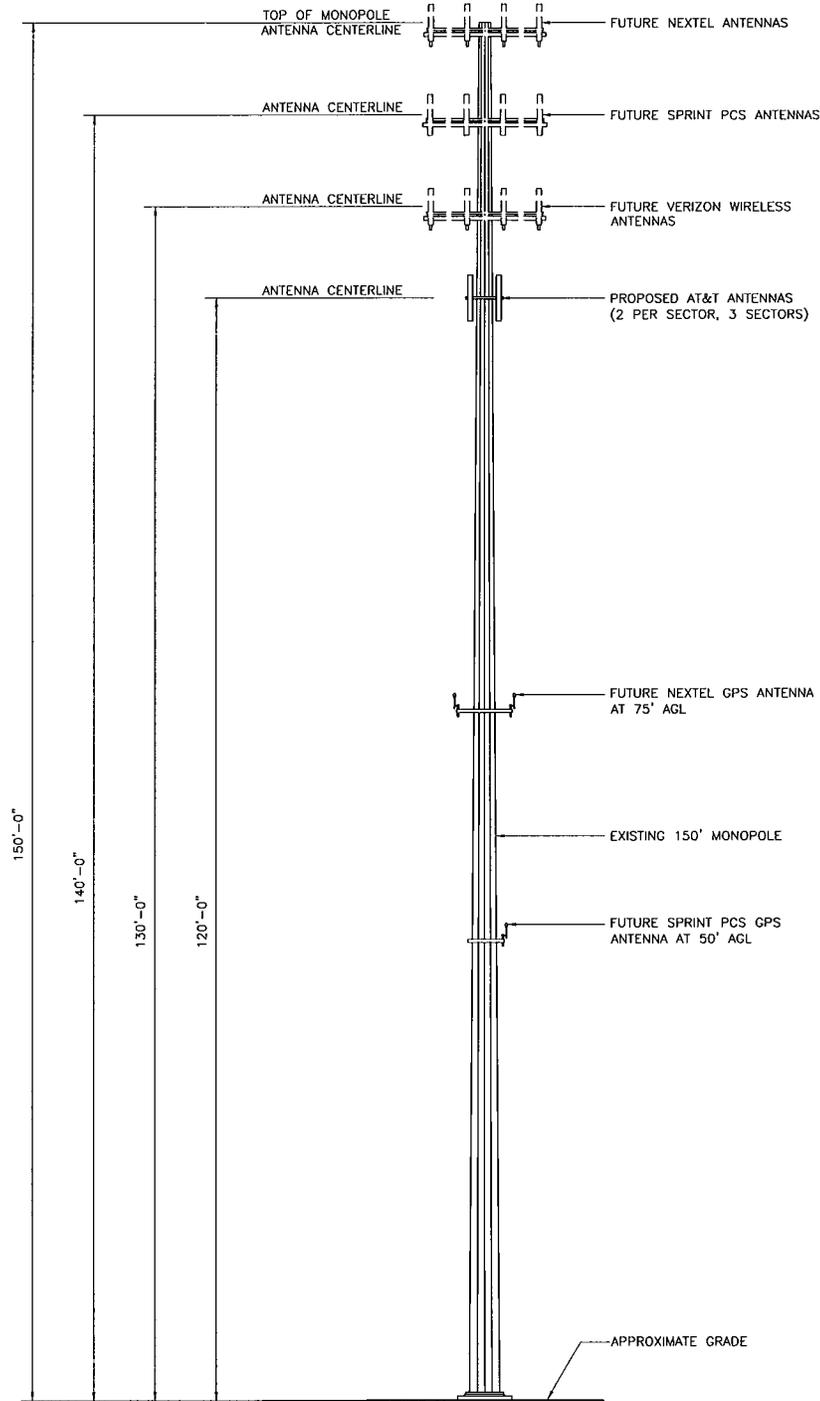
LATITUDE:	41.43691 (NAD 83)
LONGITUDE:	72.36679 (NAD 83)

URS
URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882
1-(860)-529-5566 (FAX)

 **AT&T**
AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06902

DRAWING TITLE: PARTIAL SITE PLAN
PROJECT INFORMATION: EAST HADDAM - SOUTH CT-540
135 HONEY HILL ROAD
EAST HADDAM, CONNECTICUT 06423
TOWER OWNER: SPECTRASITE COMMUNICATIONS
400 REGENCY DRIVE
CARY, NORTH CAROLINA 27511

DRAWING NUMBER: 913-010-540A-SC1	
REVISION NO. 1	DRAWN BY: HLM
DATE ISSUED: 03/04/03	CHECKED BY: JCF
SCALE: AS NOTED	APPROVED BY:
SHEET NO. 1 OF 2	
URS JOB NO.: BA1041 (36915130)	



1 TOWER ELEVATION
 SC-2 SCALE: 1" = 20'-0"



ISSUED FOR SITING COUNCIL

LATITUDE: 41.43691 (NAD 83)
 LONGITUDE: 72.36679 (NAD 83)



URS CORPORATION-AES
 795 BROOK STREET, BLDG 5
 ROCKY HILL, CT. 06067
 1-(860)-529-8882
 1-(860)-529-5566 (FAX)



AT&T WIRELESS PCS LLC
 12 OMEGA DRIVE
 STAMFORD, CONNECTICUT 06902

DRAWING TITLE: TOWER ELEVATION
 PROJECT INFORMATION: EAST HADDAM - SOUTH
 CT-540
 135 HONEY HILL ROAD
 EAST HADDAM, CONNECTICUT 06423
 TOWER OWNER: SPECTRASITE COMMUNICATIONS
 400 REGENCY DRIVE
 CARY, NORTH CAROLINA 27511

DRAWING NUMBER: 913-010-540A-SC2	
REVISION NO. 1	DRAWN BY: HLM
DATE ISSUED: 03/04/03	CHECKED BY: JCF
SCALE: AS NOTED	APPROVED BY:
	SHEET NO. 2 OF 2
URS JOB NO.: BA1041 (36915130)	



CT-0063 [East Haddam]
 Structural Evaluation of 150' Summit Monopole
 135 Honey Hill Road
 East Haddam, CT 06423
 Middlesex County

Date: February 20, 2003

SpectraSite Engineering has performed a *Level 1 evaluation*¹ for the above-noted tower. The evaluation was based on requirements of the TIA/EIA-222-F Standard and the 1996 BOCA National Building Code for a basic wind speed of **85 mph** without ice and 75% of the wind load with 1/2" radial ice.

Table 1. Existing and Proposed Antennas

ELEVATION (Ft-AGL)	ANTENNA	CARRIER	COAX*	NOTES
150	(12) Decibel DB844H90E on Low Profile Platform Mount	Nextel	(12) 1-1/4"	Existing
140	(8) Decibel DB980F65T2E-M (4) Decibel DB980F90T2E-M on Low Profile Platform Mount	Sprint	(24) 1-5/8"	Proposed
130	(1) Lucent KS24019 (12) Decibel DB844H90E-XY on Low Profile Platform Mount	Verizon	(1) 1" (12) 1-5/8"	Proposed
120	(6) Allgon 7250 on T-Arm Mounts	AT&T	(12) 1-1/4"***	Proposed

*Coax installed inside pole.

**Use existing ports to install coax inside monopole.

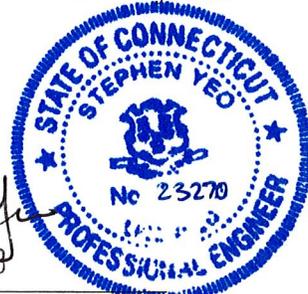
The subject tower and foundation are *adequate* to support the above stated loads and *in conformance* with the requirements of TIA/EIA-222-F Standard and the 1996 BOCA National Building Code.

The tower should be re-evaluated as future loads are added or if actual loads are found different from those mentioned in Table 1.

Contact the undersigned with any concerns.


 Raphael Mohamed, P.Eng.
 Project Engineer
 919-465-6629


 FEB 25 2003
 Stephen Yeo, P.E.
 Senior Design Engineer



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Connecticut.

¹ Level 1 evaluation means:

- the applied (existing and proposed) loads (Table 1) on the tower are compared to the original design loads
- the design wind criteria is compared to the recent code requirements.



RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 913-010-540

March 10, 2003

**Prepared by AT&T Wireless Services, Inc.
Galen Belen RF Engineer**

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1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 135 Honey Hill Road, East Haddam, CT 06423. This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

2. Site Data

Site Name: East Haddam South	
Number of simultaneously operating channels	12
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	120.00 feet
Antenna Aperture Length	5 feet

3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility¹:

$$PowerDensity = \frac{0.64 * 1.64 * N * ERP(\theta)}{\pi * R^2} (mW/cm^2) \quad Eq. 1-Far-field$$

Where, N = Number of channels, R = distance in cm from antenna centerline, $ERP(\theta)$ = The power of a half wave dipole expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBd.

$$PowerDensity = \frac{P_{in} / ch * N * 10^3}{2 * \pi * R * h * \alpha / 360} (mW/cm^2) \quad Eq. 2-Near-field$$

Where P_{in}/ch = Input power to antenna terminals in watts/ch, R = distance to antenna centerline, h = aperture height in meters, α = 3 dB beam-width of horizontal pattern.

¹ RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts (μW), a millionth of a watt, per square centimeter (cm^2). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

4. FCC Guidelines for Evaluating the Environmental Effects of RF Radiation

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites.² Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density is 0.003693 mW/cm² which occurs at 120 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.000131 mW/cm² at a distance of 4 feet. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

Table 1: Maximum Permissible Exposure limits for RF radiation

<i>Frequency</i>	<i>Public/Uncontrolled</i>	<i>Occupational/controlled</i>	<i>Maximum power density at Accessible location</i>
Cellular	.580 mW/cm ²	2.9 mW/cm ²	0.003693 mW/cm ²
PCS	1 mW/cm ²	5 mW/cm ²	

The maximum power density from AT&T and Verizon’s proposed system represents only 0.61% of the public MPE limit for PCS frequencies. As other transmitters are also located at this site, I have taken the findings of the most recent Siting Council filing on this site, and added that exposure to ours. I find that the combined exposures are 11.74% of the Maximum Permissible Exposure for uncontrolled populations.

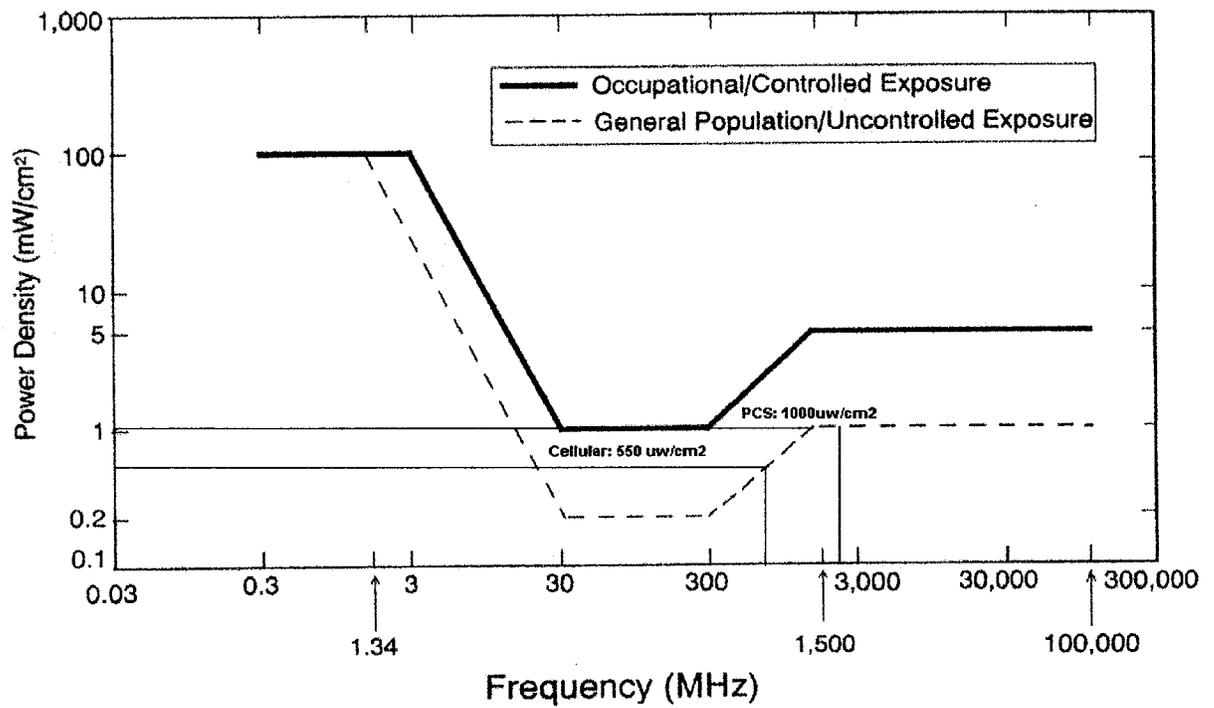
6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 11.74% of Maximum Permissible Exposure, a level of RF energy that is well below the limit established by the FCC.

² 47 U.S. C. Section 332 (c) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

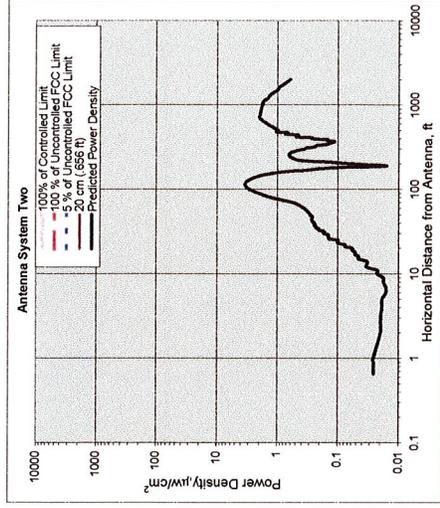
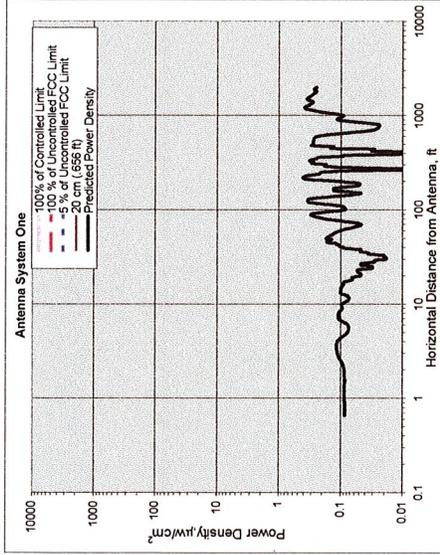
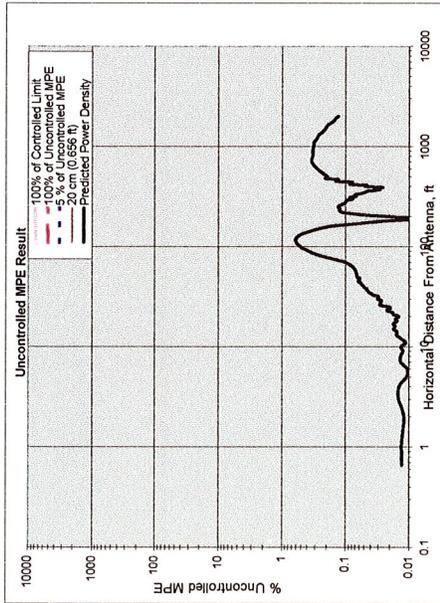
7. FCC Limits for Maximum Permissible Exposure

FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



AT&T Wireless Services, Inc.

8. Exhibit A



Number of Antenna Systems: 2
Meets FCC Controlled Limits for The Antenna Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

Meets 6% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Analysis Required.

Power Density mW/cm ²	@ Horiz. Dist. feet
Maximum Power Density = 0.003693	0.61
164.91 times lower than the MPE limit for uncontrolled environment	120.00
Composite Power (ERP) = 10,500.00	Watts

Site ID: 913-010-540-A01
Site Name: East Haddam South
Site Location: 135 Honey Hill Road
East Haddam, CT, 06423

Performed By: Galen Belen
Date: 3/05/03

The most recent Siting Council filing reflects that the combined % MPE at this site is: 11.1343
The combined % MPE when adding AT&T Wireless and Verizon antennas will therefore be: 11.74070573

Antenna System One

Frequency	units	Value
# of Channels	MHz	1945.00
Max ERP/Ch	Watts	12
Max Pwr/Ch Into Ant.	Watts	250.00
(Center of Radiator)	Watts	5.66
Calculation Point	feet	120.00
(above ground or roof surface)	feet	6.00
Antenna Model No.		0.00
Max Ant Gain	dBd	Align 7250.03
Down tilt	degrees	16.30
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant _{bottom}	feet	111.45
WOS?	Y/N?	n

Ant System ONE Owner: AT&T
Sector: 3
Azimuth: 60/150/270

Antenna System Two

Frequency	units	Value
# of Channels	MHz	890.00
Max ERP/Ch	Watts	30
Max Pwr/Ch Into Ant.	Watts	250.00
(Center of Radiator)	Watts	15.77
Calculation Point	feet	130.00
(above ground or roof surface)	feet	6.00
Antenna Model No.		0.00
Max Ant Gain	dBd	D8844H90-XY
Down tilt	degrees	12.00
Miscellaneous Att.	dB	2.00
Height of aperture	feet	0.00
Ant HBW	degrees	4.00
Distance to Ant _{bottom}	feet	90.00
WOS?	Y/N?	n

Ant System TWO Owner: Verizon
Sector: 3
Azimuth: 0/120/240

SpectraSite Site # CT- 0063



Nextel 851.00000 Decibel DB844H90-XY 150.0 0.5873

Nextel data based on previous filing - submittal to East Haddam Planning and Zoning, approval 7-10-01

Sprint PCS 1950.00000 13.5 11 Decibel DB980965E-M 140.0 505.36 0.1021 1.0000

Total MPE for one sector of Sprint PCS antennas (proposed)

Cumulative MPE for one sector of each carrier currently on tower and proposed for tower as Percentage of FCC General Population/Uncontrolled Standard

*Ground reflection factor of 1.5 fold for all calculations

9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland
Federal Communications Commission
Office of Engineering and Technology
Washington, DC 20554

RF Safety Program: 202-418-2464
Internet address: rfsafety@fcc.gov
RF Safety Web Site: www.fcc.gov/oet/rfsafety

10. References

- [1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).
- [2] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).
- [3] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).
- [4] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.
- [5] *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields*, OET Bulletin 65, August, 1997.

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